Fig. 1

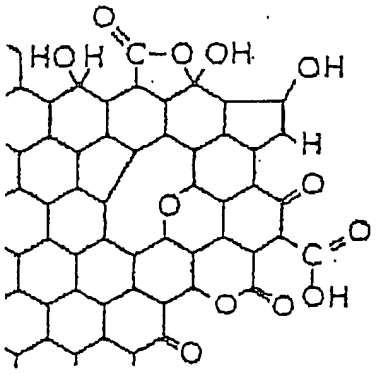
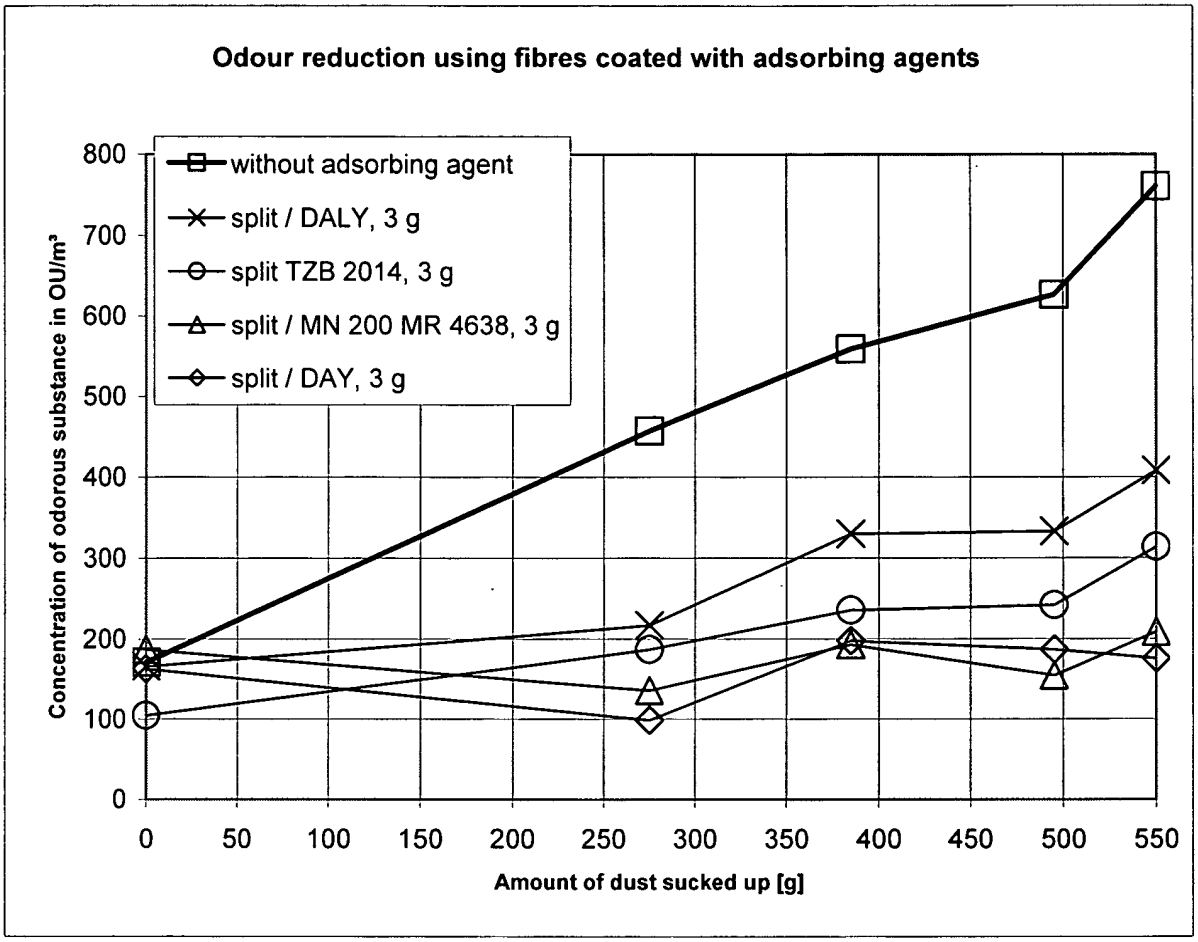


Figure 2




| Amount of dust in g | 0 | 275 | 385 | 495 | 550 |
|---|---|---|---|---|---|
| split / DALY, 3 g | 166 | 217 | 330 | 333 | 408 |
| split / MN 200 MR 4638, 3 g | 187 | 136 | 193 | 155 | 209 |
| without adsorbing agent | 171 | 457 | 559 | 627 | 761 |
| split / DAY, 3 g | 163 | 99 | 198 | 187 | 176 |
| split TZB 2014, 3 g | 105 | 187 | 236 | 242 | 314 |

**Figure 3**

| Test series | Adsorption material | | Adsorbing agent | | | | Efficiency (%) | |
|---|---|---|---|---|---|---|---|---|
| | Type | Trade name Manufacturer | Supporting material | Amount of adsorbing agent used in the dust collection chamber (g) | Coating (%) | Amount of adsorbing agent in the dust collection chamber (g) | with 275 g dust | with 550 g dust |
| X | bamboo active charcoal | BW-Pulver, Aqua Air Adsorbens | split fibres 5 mm | 2,5 | 12 | 0,30 | 72 | 76 |
| X | wood active charcoal | HP5-Pulver Aqua Air Adsorbens | split fibres 5 mm | 5 | 5 | 0,25 | 66 | 79 |
| X | cocnut shell active charcoal | CP2-Pulver Aqua Air Adsorbens | split fibres 5 mm | 10 | 4 | 0,40 | 77 | 63 |
| XI | wood active charcoal | HP5-Pulver Aqua Air Adsorbens | split fibres 5 mm | 2,5 | 5 | 0,13 | 54 | 54 |
| IX | CBP | CBP Kunz | split fibres 5 mm | 10 | 3 | 0,30 | 69 | 63 |
| XII | Zeolite 7.8 ; modulus 300 | DAY Degussa | split fibres 5 mm | 3 | 10 | 0,30 | 78 | 78 |
| XII | Zeolite 7.6 x 6.4 ; modulus 200 | TZB 2014 TRICAT | split fibres 5 mm | 3 | 10 | 0,30 | 59 | 59 |
| XII | Zeolite 7.8 ; modulus 100 | DALY TRICAT | split fibres 5 mm | 3 | 10 | 0,30 | 53 | 46 |
| XIV | Zeolite 5.5 , modulus 1000 | TZP 9024 TRICAT | split fibres 5 mm | 3 | 10 | 0,30 | 29 | 21 |
| XIV | SDVB, macroporous | XAD 1600 Rohm & Haas | split fibres 5 mm | 3 | 13 | 0,39 | 74 | 46 |
| XII | SDVB, macroporous | MN200 MR4638 Purolite | split fibres 5 mm | 3 | 10 | 0,30 | 70 | 73 |
| XIX | SDVB, macroporous | MN200 MR4638 Purolite | macroporous polymer XAD1600 Rohm & Haas | 1,7 | 70 | 1,7 | 77 | 84 |

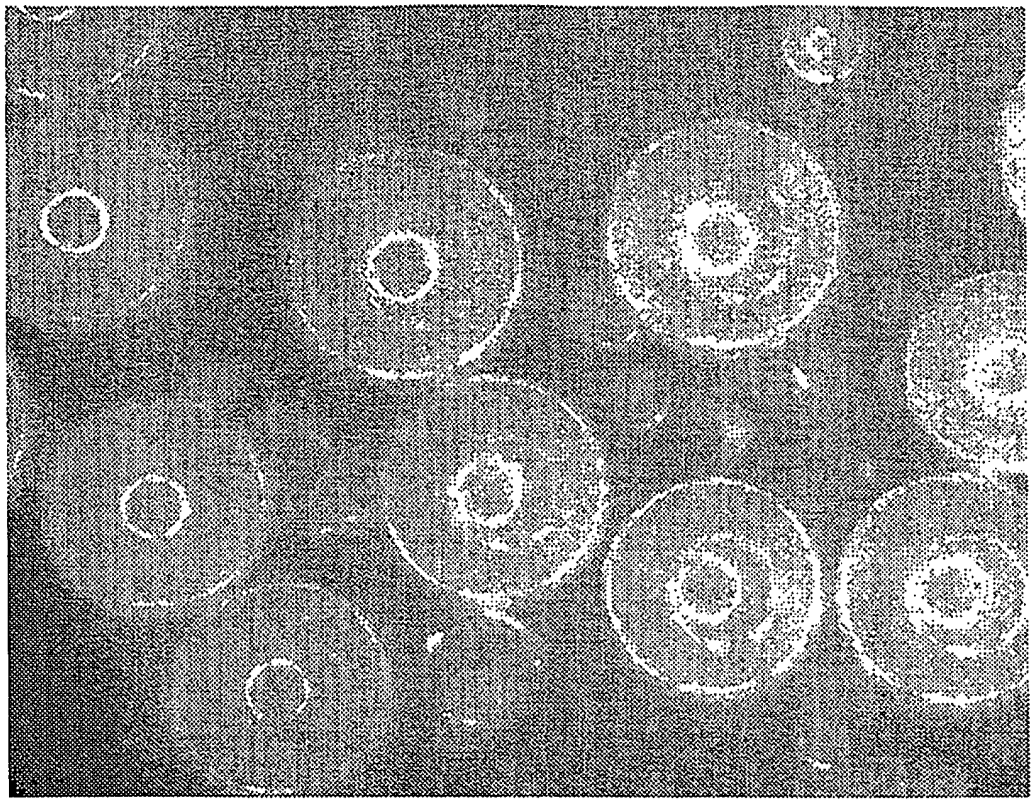


Fig. 4A

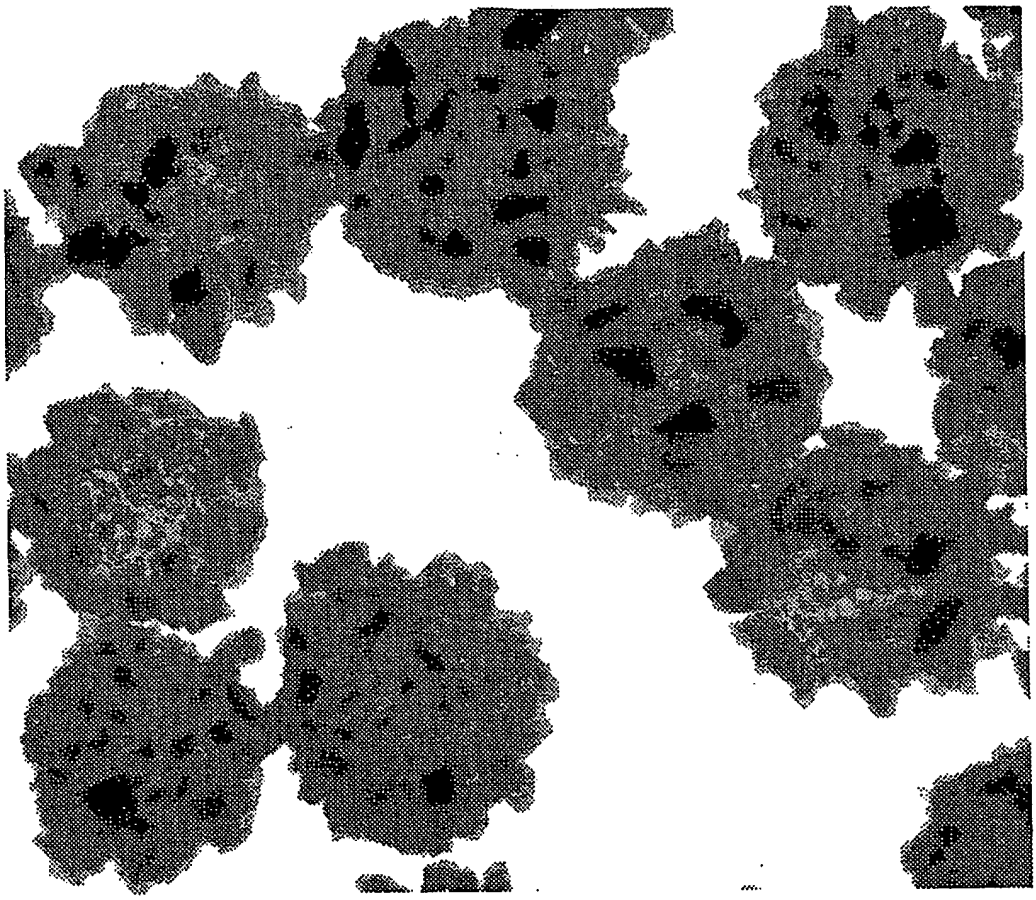


Fig. 4B